

FIGURE 3.9.2 Seismic strengthening by providing a new shear wall system.

3.9.3 STRUCTURAL ADDITIONS

A deficient building may be strengthened by a structural building addition that is designed to resist the seismic forces generated within the addition as well as all or a portion of the forces from the existing building. This alternative has the obvious advantage of generating additional useful space while upgrading the existing building. IBM Building 12 in San Jose, California, is an example of an existing building bracketed by two new additions designed to carry the entire load (Figure 3.9.3). Few modifications to the interior of the existing building were required in this approach.

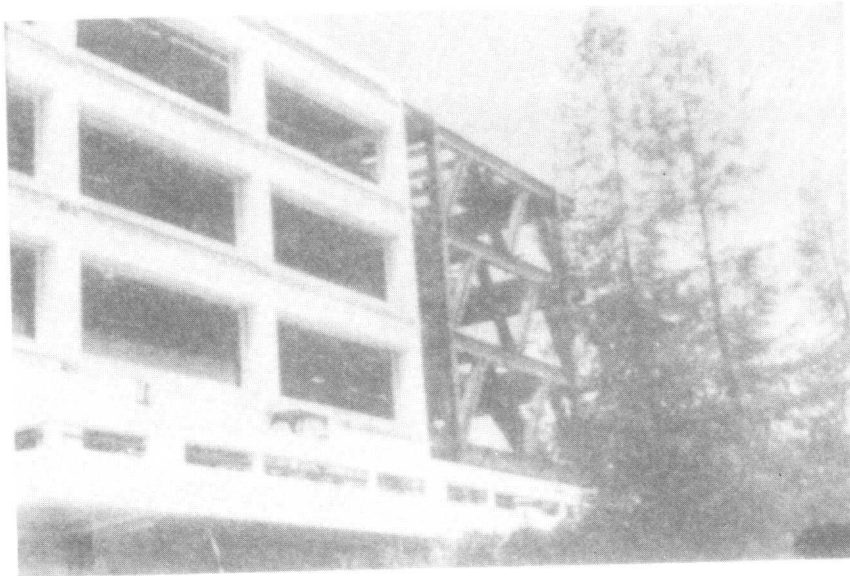


FIGURE 3.9.3 Seismic strengthening with a new building addition.